Distr.
LIMITED

IPCT.8
25 November 1986

ENGLISH

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Second Meeting of the Advisory Group
of Industrial and Technological Information Bank (INTIB)

Vienna, Austria, 1-3 October 1986

REPORT*

---

* This document has been reproduced without formal editing.

V.86-62482

CONTENTS

	Page
Introduction	1
The global industrial information scene	1
Conclusions and recommendations	
Review of past operations and re-orientation of INTIB activities	3
Nodes	3
EDP and inexpensive communication systems	5
New initiatives proposed	5
Technology supply data base	5
Small-scale information system	6
Sectoral dossiers	6
Energy information system	7
INTIB bulletin	7
Strengthening national capabilities	7
Review and evaluation	8
Charging for INTIB services	8
General recommendations	9

Annexes

I. Agenda	11
II. List of participants	14
III. List of documents	18

Introduction

1. The Second Meeting of the Advisory Group of Industrial and Technological Information Bank (INTIB) was held at Vienna, Austria, from 1-3 October 1986. The agenda, list of participants and the list of documents are attached as annexes.

2. The objective of the Second Meeting of an Advisory Group of INTIB was to bring together experts to review the elements of a medium-term action programme to re-orient the activities of INTIB in the light of the conclusions of the first Round Table discussion.

3. The Senior Technical Adviser of the Department for Industrial Promotion, Consultations and Technology (DIPCT) of UNIDO welcomed the participants and made organizational remarks.

4. The meeting elected Dr. O.A. El-Kholy as Chairman and Mr. B. Sahay as Rapporteur.

The global industrial information scene

5. The meeting began with a review of country and organizational experiences as shown by a number of papers highlighting the relevant developments achieved by India, the People's Republic of China, Tanzania, Tunisia, and the English-speaking Caribbean countries. The reports reflected a variety of situations regarding needs, capabilities, modes of operation and organizational frameworks. They expressed appreciation of the role of INTIB as a valuable source of information on technology choices and voiced a general satisfaction with INTIB's endeavours to support industrial development in their countries. In each case specific recommendations for a further strengthening of relations between INTIB and its end-users were made and these are reflected in the conclusions and recommendations of the meeting. Reports by a number of private, regional and international organizations involved in the field of industrial information reviewed their recent activities and experiences in this field, particularly in relation to the needs of developing countries, as well as their ongoing plans to develop and enhance such services, with specific emphasis on those aspects relating to INTIB operations. They indicated the desirability of co-operation with INTIB in this field, to the mutual advantage of both parties, and their willingness to do so.

6. The meeting moved next to review recent developments in modern information technology and its impact on industrial development. These highlighted the current trend in the operation of information systems such as INTIB. The main features of such a typical system that INTIB could incorporate were characterized as:

- the combination of both offers and demands in one system and the possibility of automatic matching;

- the compilation of information on markets and business opportunities as well as on technology;

- the availability of the system for access and feeding information both by end users and intermediaries;

- accessibility to UNIDO users around the clock without national or regional limitations;

- the use of appropriate telecommunication and computer technologies is advantageous only in countries with telecommunication linkages;

- the standardization of the product classification system for easy access can be performed in domestic languages if the classification system is available in that particular language;

- the system could eventually be self-supporting. While resources define the scope and quality of the service, there are good reasons to offer these services free of charge.

7. The issues relating to Transborder Data Flow (TDF) were reviewed. The attention of the meeting was drawn to the emerging problems relating to data protection, socio-economic and political considerations, their possible impact on the development of TDF, and to the ongoing world-wide activities to tackle these problems. UNIDO was invited to participate in efforts to formulate international guidelines and treaties for the regulation of TDF as a practical solution to these problems.

8. An analysis of the main elements of cost, speed, quality and coverage of the various information data bases was presented as well as some suggestions, made for more effective utilization of such data bases.

9. The Group next moved on to a detailed discussion of the Secretariat's working paper outlining INTIB's medium-term programme and reached the following conclusions and recommendations:

Conclusions and recommendations

A. Review of past operations and re-orientation of INTIB activities

10. The Group expressed its general satisfaction with the progress made by INTIB over the last year and appreciated the efforts of the Secretariat in continuously developing the scope and quality of INTIB's services, particularly in view of the modest scale of resources made available to it. It made specific recommendations on a number of issues as follows:

Nodes

11. The Group endorsed the approach of the Secretariat in providing a broader base for its operations through a network of focal points/nodes. It reviewed with satisfaction INTIB's experience so far with national focal points and nodes in broadening the scope of correspondents contributing to the Industrial Inquiry Service. It recommended the maintenance of a clear distinction between the national focal points acting essentially as co-ordinating bodies for national efforts and the nodes as the specialized operational units handling industrial information.

12. As regards criteria for selection, those for the focal points are intrinsically different from those applicable to the selection of nodes as defined above. A focal point should have the capability and mandate to co-ordinate national activities and the prestige necessary to ensure the willingness of others to co-operate. There need only be one focal point in each country or region.

13. A node, on the other hand, should have the capability of providing the information needed, as well as the good working relations with industry that would assure its effectiveness. It should also possess the capability for adapting to local needs and conditions, the financial resources needed to sustain its operation, the professional competence, level of information-handling technology and the proper location within the country.

14. It was noted that since the local scene varies considerably from one country to another, the selection of focal points/nodes has to take careful note of the specific conditions within each country. In this context they could be national, sub-regional or regional, as best fits the national and regional situation.

15. The role of focal points/nodes should extend beyond supplementing INTIB's efforts in operating an inquiry service to include:

- linking the provision of information to the solution of industrial problems as an extension service of the node itself, or provide it through other institutions in the country or region;

- promoting INTIB and its utilization by a larger population of users through various means, including training seminars and courses on INTIB operations, and using modern computer-aided instruction methods whenever possible;

- operating as a national depository of UNIDO documents in suitable form to cut down cost of providing information from Vienna;

- it was suggested by some members that the focal points/nodes, might in certain cases undertake a marketing and promotional role to cover part of their expenses.

16. The activities of the focal points/nodes needs to be carefully monitored so as to maintain the quality of INTIB answers and its relevance to the needs of end users. Relations with INTIB would best be clarified by terms of reference particularly if computerized operations are involved. UNIDO, while not directly financing the activities of the focal points/nodes, should help the channel funds to enhance their activities.

17. It was emphasized that the role of such components of a network can only be clearly defined within a national information policy and that such a definition needs to coincide with the views of INTIB.

EDP and inexpensive communication systems

18. The Group welcomed the actions taken by the Secretariat in adopting EDP techniques in INTIB operations, and the impact these will have on the effectiveness of such operations. It noted that these actions need to be complemented by the establishment of on-line communication that would greatly enhance the access of data to and from INTIB, as well as other available techniques for information handling. The Group wished to emphasize that reaping the full benefit of these developments calls for a considerable increase in the resources made available for this purpose. It took note of the proposed actions in the context of an IDDA project for providing hard and software to members of the subregional African network and called upon the Secretariat to report on experiences gained at the next Group meeting.

19. As regards the proposed experiment with inexpensive satellite communication systems, the Group - while welcoming and endorsing this timely initiative - drew attention to the need to give careful consideration to the legal aspects and problems that could arise in co-ordinating with the local PTT authorities. It would review the results of this experiment at its next meeting. The Group also recommended that INTIB should monitor the development projects of other organizations in both fields and co-ordinate with them on these subjects.

B. New initiatives proposed

Technology supply data base

20. The Group welcomed this initiative and particularly the impact it would have on the ability of INTIB to respond quickly and effectively to inquiries from end users. It recommended investigating and benefiting from the experience of similar efforts by other networking systems in close co-ordination with these systems to ensure complementarity and to give the system sharply focused distinguishing features. The Group members reviewed the proposed format and made specific suggestions based on the importance of addressing as clearly and as simply as possible the needs of the inquirer. As regards inclusion in this data base, it was suggested that whenever possible, prestigious national bodies, e.g. chambers of industry and commerce, national engineering organizations, focal points, and government departments, be called upon to review and filter applications for inclusion to ensure a viable level of competence.

Small-scale information system

21. The Group expressed its appreciation of the role such an information system could play in INTIB operations in responding to the needs of small and medium scale industries. It recommended that INTIB be given a specific focus through related activities such as those of financing institutions. For example, INTIB could, at a minimum level, direct inquiries from financial institutions to places where a similar viable business exists. In identifying sources of reliable data on small business performance INTIB should make sure that they are active and enjoy the confidence of the small business. The individual national nodes should assist in identifying such sources.

22. The work of INTIB in producing and disseminating data on scaled-down industrial processes was commended. The Group recommended that this be continued, supplemented with economic performance data accompanying the technical information when making presentations to banks and entrepreneurs.

23. The informal network which operates between banks has probably the most vital effect on deciding whether a project is viable. It would be useful for INTIB to be aware of the kind of information which is circulated through such networks and, if possible, to include such sources of information in its response.

24. As regards updating, it was emphasized that the main purpose here is to confirm the existence of the supplier and the availability of the technology. Here again, national bodies can help considerably in updating.

Sectoral dossiers

25. While commending the effort and quality of the prototype dossier, the Group recommended that the dossiers also highlight experience with the technologies in question in specific conditions and emphasize the sources of information more than the information itself. Selection of sectors should be guided by requests from small- and medium-scale enterprises in developing countries. As regards dissemination, the dossiers should be made available to the nodes and be disseminated through them.

Energy information syster

26. Bearing in mind the information within UNIDO on energy relating specifically to industry, and appreciating the value of maintaining and updating it to the work of INTIB, the Group recommended that the emphasis should be on compiling information on energy-saving technologies particularly for small and medium industries. The collection of relevant case studies, from developing countries in particular, should be given priority and co-ordination with other activities in and outside the UN system be continued.

INTIB bulletin

27. The Group welcomed this as a useful source of information for and on the focal points/nodes as well as on other organizations within a country connected with industry. It recommended that information on UNIDO field projects and contracts be also included, as well as meetings and events that interest the members of the INTIB network six to twelve months ahead of time.

Strengthening national capabilities

28. While appreciating the efforts exerted in this field, it was recommended that in addition:

(a) Training of personnel can be expanded considerably through involvement of the focal points with INTIB/UNIDO providing training material in traditional and CAI form.

(b) A series of guidelines on methodologies for the various aspects of operation be prepared, on the basis of a needs analysis.

(c) INTIB be involved in facilitating the exchange of personnel and experiences between institutions working in similar fields.

29. The Group emphasized that technical assistance in building national capabilities in the field of industrial information is essential for the more effective operation of INTIB and note with satisfaction that UNIDO's policy is to incorporate INTIB as an integral part of technical assistance in this field.

30. The Group noted with great satisfaction the provision of continued advisory services to developing countries as an activity distinct from, and complementary to, technical assistance, in the sense that institutions that were built or strengthened through technical assistance would maintain their viability since UNIDO continues to provide advisory services and substantive contacts are maintained with them. Such contacts could also generate new requests for technical assistance.

Review and evaluation

31. The Group noted that monitoring and evaluation is beginning to be built in the system and strongly recommended that this be based on effectiveness (user satisfaction) of the service rendered rather than on a strict cost/benefit approach which is not valid in the evaluation of any information system. As regards evaluating the mechanics of the INTIB operation and training, the Group recommended that the established procedures and methodologies for evaluation be adapted to the specific needs of INTIB and applied when evaluating such operations. Detailed case studies of the manner in which end users have used and benefited from INTIB services in the long run could also be prepared as a tool for evaluation, as well as an effective means for sensitising decision makers to the value of information in industrial development.

Charging for INTIB services

32. While appreciating the need for considering the levying of charges for INTIB services for reasons, not the least important of which is their contribution to the evaluation of effectiveness, the Group recommended that:

- this be carried out within an overall charging policy for UNIDO as a whole;

- this be guided by the experience and policies of other UN organizations;

- this take into consideration the varieties of situations of users relating, inter alia, to the type of user, the use to be made of the information, the type and volume of information, etc.

C. General recommendations

33. The structure of a medium-term programme for INTIB can be envisaged as follows:

(a) Besides the re-orientation of activities, INTIB needs to operate at a much higher level of activity, including consultative services to industry, and to contribute even more towards increasing the flow of industrial and technological information to developing countries (facilitating access to data bases, access to technological information in the public domain, enlarging the network of correspondents, increasing information on suppliers of technology, interaction with the United Nations and other information systems and promoting the South-South flow of information).

(b) Dissemination of information (collecting and disseminating within UNIDO through the Industrial Development Abstracts and other activities, disseminating to clients, particularly in developing countries, through replies to inquiries and provision of information packages and profiles, forming national focal points and nodes).

(c) Support to national information activities (continuous backstopping of national institutions by provision of information and advice, facilitating formulation and implementation of national industrial information policies, training of personnel, methodologies to promote increased use of information and links to decision-making, establishment of information units in small and medium enterprises or in professional/business organizations of such enterprises).

(d) Evaluation and application of modern information technology (facilitating application of such technology in suitable countries at the national level and designing and equipping INTIB with facilities which will permit interconnection with the national institutions).

(e) The formulation and implementation of a substantial promotion effort that would sensitize more potential users to INTIB services and thus widen the scope of its operations.

34. As regards the content of information, the areas to which priority might be given include: choice of technology (provision of assessed information on the choice of technology is the distinguishing feature of INTIB), information on technology acquisition (sources of technology, information for small and medium industry and information on the impact of new technologies on INTIB sectors (including current awareness information through bulletins to facilitate monitoring of technological change). In this context, INTIB is advised to formulate a methodology for keeping track of changing needs in different countries.

35. Support to national institutions becomes a matter of high importance in making the services of INTIB more effective. Possible support is not confined to technical assistance for creating or strengthening information institutions but comprises the stimulation of development of national industrial information policies, training of industrial information specialists in both bibliographic and extension-oriented information dissemination, promotion of increased use of industrial information in national activities, better understanding of industrial activities in the country and, in particular, strengthening of the links to decision-makers.

36. The present level of INTIB's resources is inadequate for the maintenance of an increasingly effective level of operations in the medium-term as envisaged above. Apart from increased resource allocations from regular sources, efforts may be made to seek additional resources from other sources in accordance with UNIDO policy.

Annex I

Agenda

Wednesday, 1 October 1986

08.30-09.00 hrs.	Registration
09.00-10.30 hrs.	Opening session
	Welcome and organizational remarks
	Senior Technical Adviser, Department for Industrial Promotion, Consultations and Technology
	Election of Chairman and Rapporteur
	Presentation of Participants' Papers
	Topic I: Country and organizational experiences
	Mr. A. Hedda Mr. J.R. Ferreira Mr. X. Wang
10.45-12.30 hrs.	Topic I: (contd.)
	Ms. B. Gumbs Mr. R. Lafond Mr. Padgett
	Topic II: Modern information technology and its impact on the industrial development
	Dr. Schumacher Mr. E. Melrose Ms. A. David Mr. A. Wysocki Mr. L. Zhang Mr. A. Vasarhelyi
14.30-16.00 hrs.	Topic III: INTIB and end users
	Mr. M. Timoulali Mr. B. Sahay Ms. W. Nyonyi Ms. L. Kojic-Bogdanovic
16.15-17.00 hrs.	Presentation of Secretariat background paper
17.00-17.30 hrs.	General discussion of background paper

Thursday, 2 October 1986

Discussion of elements of INTIB medium-term programme

Development of INTIB network (paras. 14-19):
- . The concept of a mix of delivery systems
- . The role of the nodes/focal points
- . Elements of relationship with INTIB
- . Criteria for selection of nodes/focal points
- . Performance evaluation

Development of EDP (paras. 23-26):
- . Review of proposals of feasibility study
- . Review of proposed IDDA second phase project

08.30-12.30 hrs.

Communication systems (paras. 34-35):
- . Feasibility of suggested approaches
- . Relative merits and difficulties expected
- . Other proposals for feasible and effective communication

14.30-17.30 hrs.

Review and discussion of new initiatives:
- . Technology supply data base (para. 29): Content/format - Approaches to compilation and classification of information - Methods of access and dissemination - Charges for inclusion - Definition of contributors and users - Methods of updating - Possible follow-up activities (advisory services, investment and sources of financing - etc.)

- . Sectoral Dossiers (para. 30): Review of draft dossier on iron and steel (content and format) - Approaches to dissemination - Updating procedures - Identification of priority sectors

- . Small-scale industry information system (para. 31): Desirable distinguishing features - Contents and formatting

- . Energy information system (para. 32): Consolidation of existing information - Co-ordination with other energy information systems - Compilation of case studies on conservation in industry

---

N.B. Paras. in brackets refer to the Secretariat paper, Elements of INTIB medium-term programme.

INTIB Bulletin (para. 32):
. Review of first issue - Desirable additions and alterations - Distribution policy

Strengthening national activities (paras. 7, 20-22):
. Review of past activities and current orientations - Non-technical assistance support modes of operation - Recommendations for future action

Review and planning activities (paras. 11-13):
. Methodologies and procedures for performance monitoring and evaluation - Streamlining in-house information flow to INTIB - Other recommendations for enhancing these activities

Friday, 3 October 1986

08.30-12.30 hrs. Preparation of draft report

Demonstration of INTIB data bases

15.30-17.30 hrs. Consideration of conclusions and recommendations

Adoption of report

Concluding remarks

Annex II

List of participants

Organizations	Representative
Investment Promotion Agency (API) 63, Rue de Syrie 1002 Tunis - Belvedere Tunisia Telex: APRIN 14166	Mr. Ali Hedda Chairman
Secretariat for Industrial Technology Ministry of Industry and Trade Brasilia Brazil	Mr. J.R. Ferreira Coordinator Technological Information
Kuwait Institute for Scientific Research P.O. Box 24885 Safat Kuwait Telex: KISR 22299 KT	Mr. O.A. El-Kholy Senior Adviser
The African Regional Centre for Technology B.P. 2435 Route de Ouakam Dakar Senegal Telex: 3282 CRATEC SG	M. Timoulali Directeur Division de 1'Information et Documentation
Ministry of Industry Department of Industrial Development New Delhi India Telex: 3166565 INDY IN	Mr. B. Sahay Joint Secretary
Tanzania Industrial Research and Development Organization (TIRDO) P.O. Box 23235 Dar-es-Salaam Tanzania Telex: 41409 TIRDO	Mrs. W.N.A. Nyonyi Head, Information Department
Institute of Scientific and Technical Information of China (ISTIC) P.O. Box 640 Beijing P.R. China Telex: 20079 ISTIC CN	Mr. Wang Xiaochu Deputy Chief Division of International Relation and Co-operation

China International Economic
Information Center
Ministry of Foreign Economic
Relations and Trade
Beijing
P.R. China Telex: 22559 COMPT CN

Mr. Zhang Liang
Chief, Capital
Construction Division

China International Economic
Information Center
Ministry of Foreign Economic
Relations and Trade
Beijing
P.R. China Telex: 22559 COMPT CN

Mr. Li Jinbao
Interpreter

Computer and Automation Institute
Bureau for International
Co-operation
Victor Hugo u. 18
H-1132 Budapest
Hungary Telex: 224694 AKIBP H

Mr. A. Vasarhelyi
Director

Yugoslav Center for Technological
and Scientific Documentation
S. Penezica-Krcuna br. 29-31
fah 724
11000 Belgrade
Yugoslavia Telex: 12497 YU JCTND

Dr. L. Kojic-Bogdanovic
Director

Institute for Scientific,
Technical and Economic Information
ul. Zurawia 3/5
00-926 Warsaw
Poland Telex: IINTE-W-WA NR. 813716

Mr. A. Wysocki
Senior Adviser

Institute for Scientific,
Technical and Economic Information
ul. Zurawia 3/5
00-926 Warsaw
Poland Telex: IINTE-W-WA NR. 813716

Mr. M. Muraszkiewicz
Deputy Director

International Bureau for Informatics
P.O. Box 10253
00144 Rome
Italy Telex: 612065 IBINF I

Mr. E. Melrose
Director of Technology

World Federation of Engineering Organizations (WFEO)
Engineering Information Committee
CNIF - 19, rue Blanche
75009 Paris
France Telex: Publi 210311 F/398 CNIF

Madame A. David
President

International Development Research Centre (IDRC)
60 Queen St.
P.O. Box 8500
Ottawa
Canada K1G 3H9 Telex: 053-3753

Mr. R. Lafond
Scientific and Technical Information Group

On-line GmbH
Poststrasse 42
D-6900 Heidelberg 1
Federal Republic of Germany Telex: 461782 ACRIS D

Dr. Schumacher
Director

Intermediate Technology Development Group Ltd.
The Technology Exchange
6, Avonmouth St.
London SE1 6NX
U.K. Telex: 268312 Westcom G Attn Intec

Mr. B. Padgett
Head of UK Programme

Caribbean Industrial Research Institute (CARIRI)
University of the West Indies
Tuna Puna Post Office
Port-of-Spain
Trinidad and Tobago Telex: 3438 CARIRI WG

Mr. H. Charles
Director

Caribbean Industrial Research Institute (CARIRI)
University of the West Indies
Tuna Puna Post Office
Port-of-Spain
Trinidad and Tobago Telex: 3438 CARIRI WG

Mrs. B. Gumbs
Information Specialist

Observers

Indian Investment Centre India House Wilhelm-Leuschnerstrasse 93 6000 Frankfurt 1 Federab Republic of Germany	Mr. H.C. Pant Resident Director
Technonet Asia 1 Goldhill Plaza Podium Block #03-37 Singapore 1130	Dr. Leon V. Chico Executive Director
Oesterrische Laenderbank International Chamber of Commerce Vienna Austria	Dr. Hanns Kramberg Senior Officer
Embassy of Tunisia Ghegastrasse 3/14 1030 Vienna Austria	Mr. M. Léjri First Secretary
Investment Promotion Agency Lowenstrasse 1 8050 Zurich Switzerland	Ms. A. Mkada API Representative

UNIDO Secretariat

Senior Technical Adviser
Department for Industrial Promotions,
Consultations and Technology (DIPCT)

Chief
Industrial and Technological Information Section

Senior Industrial Development Officer
Industrial and Technological Information Section

Special Technical Adviser
Systems of Consultations

Industrial Development Officer
Systems of Consultations

Annex III

List of documents

The Agence de Promotion des Investissements and the industrial cooperation - by Mr. A. Hedda

Brazil's experience with industrial information: a project in progress - by Mr. J.R. Ferreira

Preliminary study on China national science and technology information policy: a personal view - by Mr. X. Wang

Impact of modern information technologies on the development of information systems and services in the Caribbean region - by Mrs. B. Gumbs

Action of IDRC in the field of industrial information for developing countries - by Mr. R. Lafond

Technology exchange index of licenceable technology for small and medium sized enterprises - by Mr. B. Padgett

Database business for worldwide trade and technology opportunities - by Mr. Schumacher

Transborder data flow possibilities and constrains - by Mr. A. Wysocki

Evaluation on the status and the role of computers applied to economic information system - by Mr. L. Zhang

Software, new technology and access to data bases in service of industrial information - by Mr. A. Vasarhelyi

Regionalization of INTIB for a better technological and industrial information in Africa - by Mr. M. Timoulali

Ways and means of increasing inflow of industrial and technological information to the end users of INTIB - by Mr. B. Sahay

Ways and means of promoting flow and utilization of industrial and technological information to the INTIB end-users: the Tanzanian experience - by Mrs. W. Nyonyi

Manpower training of industrial information specialists - by Mrs. L. Kojic-Bogdanovic

Elements of INTIB medium-term programme - by UNIDO Secretariat